AUTHOR INDEX TO VOLUME 15

Acharya, S., 131

Braaten, M. E., 1

Ciofalo, M., 21
Collins, M. W., 21

Hensel, Edward, 227
Hills, Richard, 227
Hwang, B. C., 127

Jeng, Yih Nen, 241

Lacroix, M., 191
Liou, Shin Chi, 241

Moukalled, F. H., 131

Patankar, S. V., 1
Prakash, C., 171

Railkar, Sudhir B., 99, 211
Rydin, R. A., 117

Santos, José L. T., 49
Shih, T. M., 127

Tamma, Kumar K., 73, 99, 211
Tan, C. H., 127
Tzanos, Constantine P., 153

Voller, V., 171

Wilson, G. L., 117

Yurko, Anthony A., 73

SUBJECT INDEX TO VOLUME 15

Adaptive grid method, modified multiple one-dimensional, 241
Adaptive nodes for convective heat transfer problems, a method of, 153
Artificial compressibility method and penalty-function method, equivalence of, 127

Bénard problem at the third critical Rayleigh number, multiple equilibrium solutions, 117
Binary solid-liquid phase change equations, numerical solution of continuum mixture model, 171
Block-corrected subdomain solution procedure for recirculating flow calculations, 1

Continuum mixture model equations describing binary solid-liquid phase change, numerical solution of, 171
Convective heat transfer problems, method of adaptive nodes for, 153

Finite-element thermal modeling/analysis formulations for layered composite materials, 73

Heat transfer during melting of a pure substance from an isothermal wall, computation of, 191
Heat transfer in turbulent recirculating flows, k-ϵ predictions using an improved wall treatment, 21
Hybrid transfinite-element formulations, evaluation and applicability of, with reference to radiation, 99

Hyperbolic heat conduction involving non-Fourier effects, specially tailored transfinite-element formulations for, 211

Incompressible flow calculation on a nonstaggered curvilinear grid, improvements to, 131
Inverse heat conduction, steady-state two-dimensional, 227

k-ϵ predictions of heat transfer in turbulent recirculating flows using an improved wall treatment, 21

Layered composite materials, finite-element thermal-modeling/analysis formulations for, 73
Linear steady heat transfer systems, sizing design sensitivity analysis using established finite element codes, 49

Melting of a pure substance from an isothermal wall, computation of heat transfer, 191
Multiple equilibrium solutions to the Bénard problem at the third critical Rayleigh number, 117

Nonstaggered curvilinear grid, incompressible flow calculation on, 131

One-dimensional adaptive grid method, modified multiple, 241

Penalty-function method and artificial compressibility method, equivalence of, 127

Recirculating flow calculations, block-corrected subdomain solution procedure for, 1

Sensitivity analysis, sizing design for linear steady heat transfer systems using established finite element codes, 49
Sizing design sensitivity analysis of linear steady heat transfer systems using established finite element codes, 49
Steady-state two-dimensional inverse heat conduction, 227
Subdomain solution procedure, block-corrected, for recirculating flow calculations, 1

Thermal modeling/analysis formulations, finite-element, for layered composite materials, 73
Transfinite-element formulations, hybrid, evaluation and applicability for radiation, 99
Transfinite-element formulations for hyperbolic heat conduction involving non-Fourier effects, 211
Turbulent recirculating flows, k-ϵ predictions of heat transfer using an improved wall treatment, 21
Two-dimensional inverse heat conduction, steady-state, 227

CONTENTS OF VOLUME 15

NUMBER 1

1 A Block-Corrected Subdomain Solution Procedure for Recirculating Flow Calculations **M. E. Braaten and S. V. Patankar**

21 k–ϵ Predictions of Heat Transfer in Turbulent Recirculating Flows Using an Improved Wall Treatment **M. Ciofalo and M. W. Collins**

49 Sizing Design Sensitivity Analysis of Linear Steady Heat Transfer Systems Using Established Finite Element Codes **José L. T. Santos**

73 Finite-Element Thermal Modeling/Analysis Formulations for Layered Composite Materials **Kumar K. Tamma and Anthony A. Yurko**

99 Evaluation and Applicability of Hybrid Transfinite-Element Formulations with Particular Reference to Radiation **Kumar K. Tamma and Sudhir B. Railkar**

117 Multiple Equilibrium Solutions to the Bénard Problem at the Third Critical Rayleigh Number **G. L. Wilson and R. A. Rydin**

127 Equivalence of Artificial Compressibility Method and Penalty-Function Method **T. M. Shih, C. H. Tan, and B. C. Hwang**

NUMBER 2

131 Improvements to Incompressible Flow Calculation on a Nonstaggered Curvilinear Grid **S. Acharya and F. H. Moukalled**

153 A Method of Adaptive Nodes for Convective Heat Transfer Problems **Constantine P. Tzanos**

171 On the Numerical Solution of Continuum Mixture Model Equations Describing Binary Solid-Liquid Phase Change **C. Prakash and V. Voller**

191 Computation of Heat Transfer during Melting of a Pure Substance from an Isothermal Wall **M. Lacroix**

211 Specially Tailored Transfinite-Element Formulations for Hyperbolic Heat Conduction Involving Non-Fourier Effects **Kumar K. Tamma and Sudhir B. Railkar**

227 Steady-State Two-Dimensional Inverse Heat Conduction **Edward Hensel and Richard Hills**

241 Modified Multiple One-Dimensional Adaptive Grid Method **Yih Nen Jeng and Shin Chin Liou**

Following page 248:

Title Page to Volume 15
Contents of Volume 15
Author Index to Volume 15
Subject Index to Volume 15